



NJ Schools Construction Corporation
BUILDING 21ST CENTURY SCHOOLS FOR 21ST CENTURY LEADERS

Society for Marketing Professional Services

John F. Spencer, CEO

September 30, 2004

James E. McGreevey, Governor



Building A Better New Jersey

**Building Schools For the 21st Century
Building Stronger Communities
Building a Robust Economy**



Intro: Program Background



Educational Facilities Construction & Financing Act Passed July 2000

\$8.6 Billion in School Construction throughout NJ

- \$6 billion for 31 Abbott Districts
- \$2.5 billion for Non-Abbott Districts
- \$100 Million for County Vocational Schools

Gov. McGreevey signs E.O. Creating SCC July 2002



Part I

The State of School Construction

Managed Activity – Building New Jersey's Economy

Actual and Projected Total Expenditures

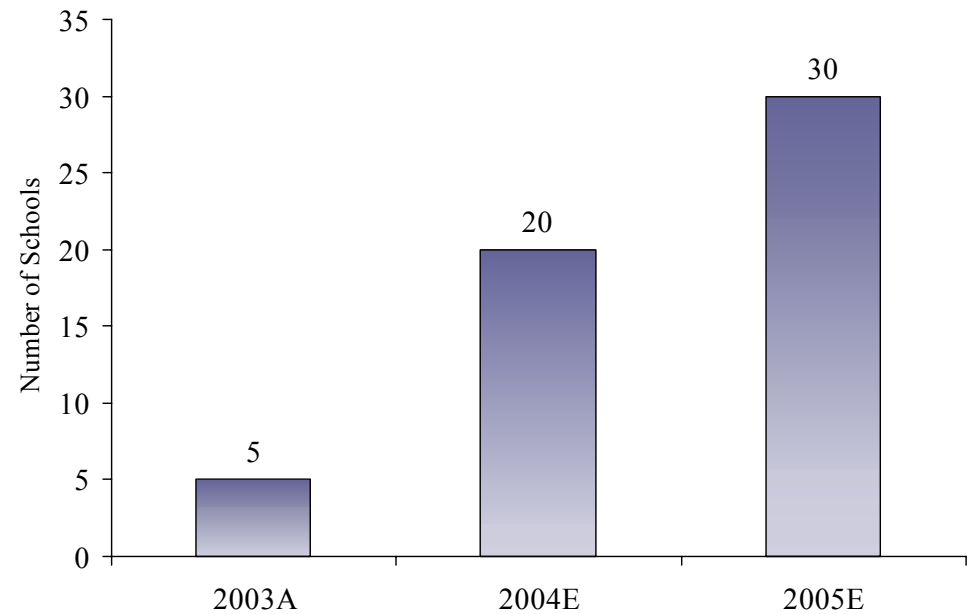
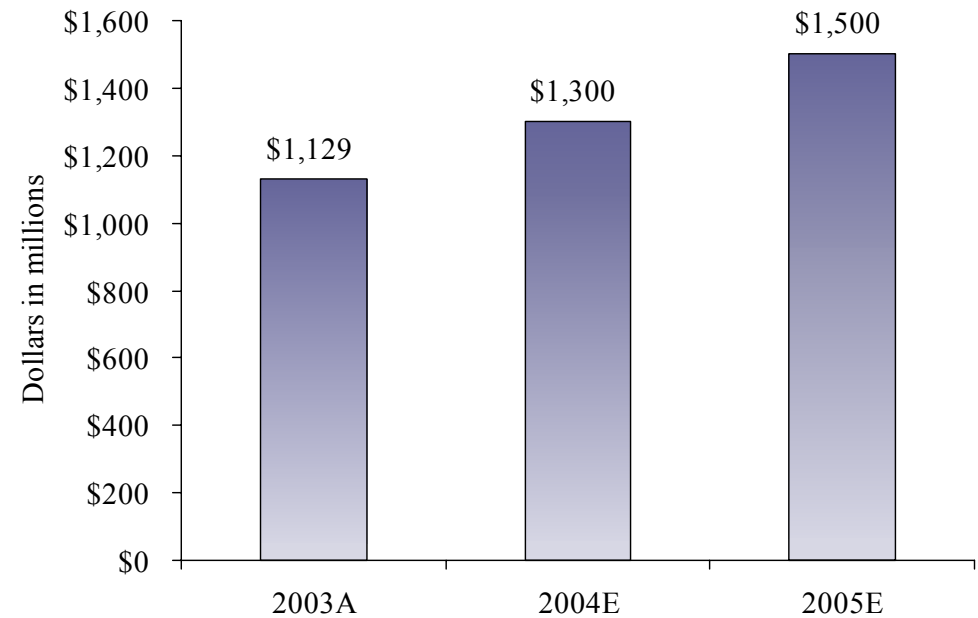


Actual and Projected New School Openings

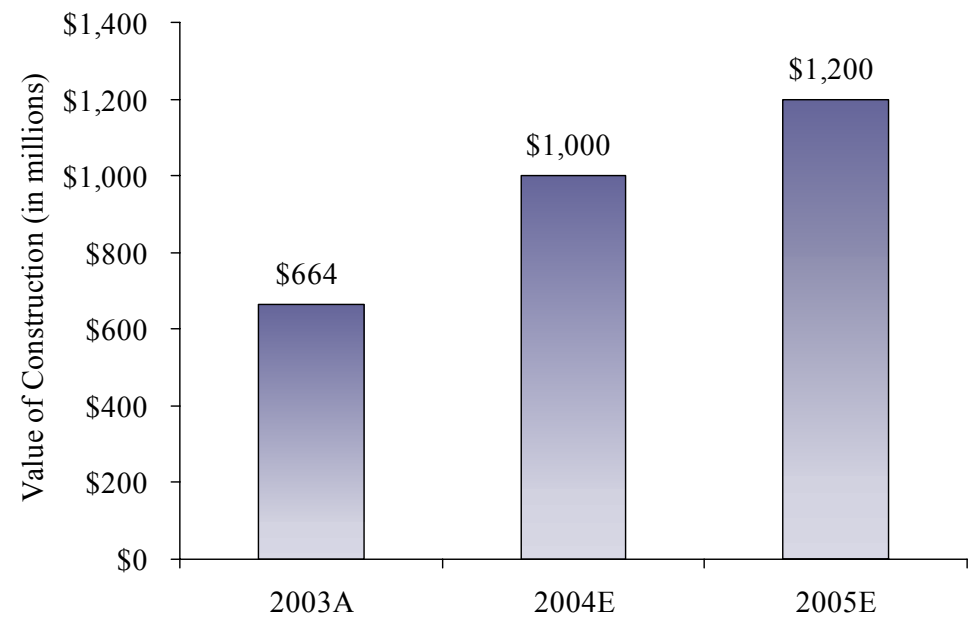
2003: 5

2004: 20

2005: 30

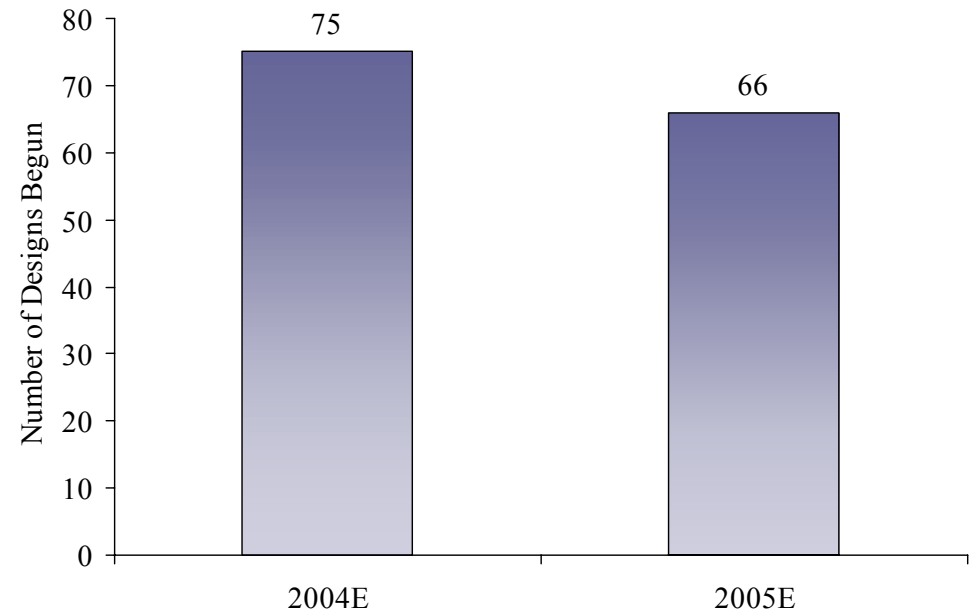


Actual and Projected Construction Awards (in millions)

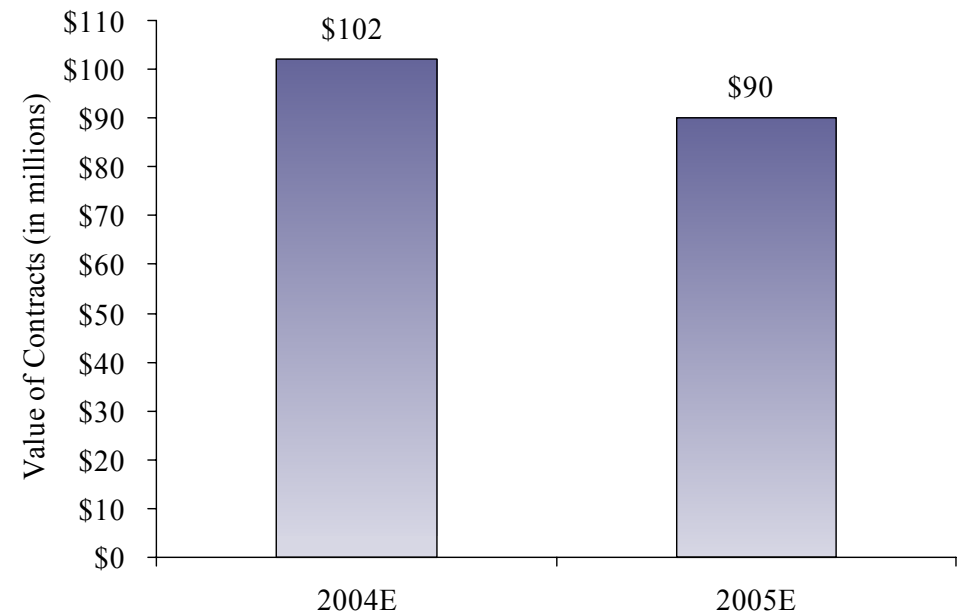


NJSCC Managed Consultant Activity – Building NJ's Economy

Actual and Projected New Consultant Contracts



Actual and Projected Consultant Awards (in millions)



Non-Abbott and Vocational Grant Activity

Actual and Projected Grant Awards



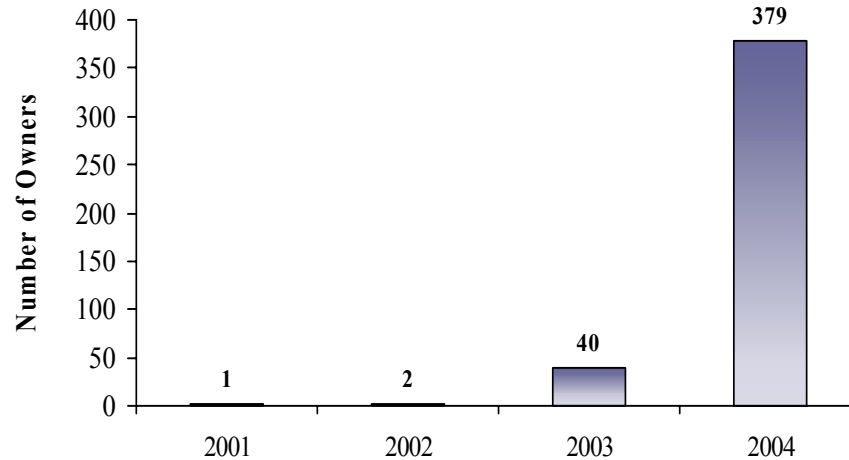
Actual and Projected Grant Disbursements



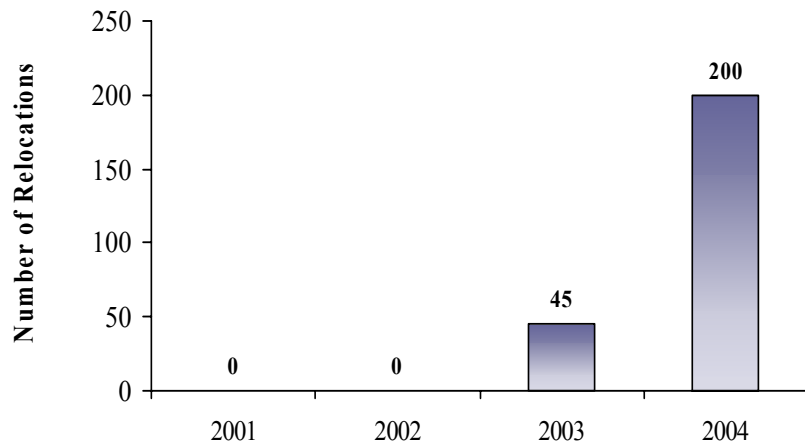
Land Acquisition and Relocations



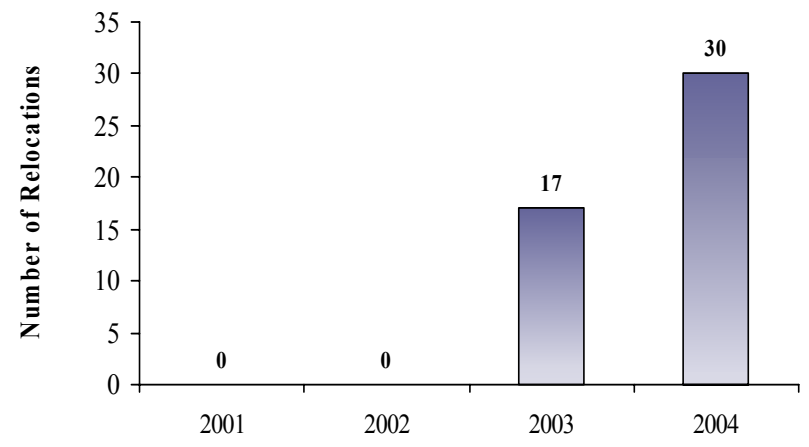
Land Acquisitions (Abbott Districts)



Residential Relocations (Abbott Districts)



Commercial Relocations (Abbott Districts)



Total Number of Firms Pre-Qualified in Engineering Disciplines

(Civil, Structural, MEP, Environmental, HVAC)

298

Limit - \$5 million or below

(in one or more disciplines)

173

Limit - Between \$5 million and \$25 million

(in one or more disciplines)

154

Limit – Unlimited

(in one or more disciplines)

67

Working with the NJSCC – Pre-Qualified Architects

**Total Number of
Pre-Qualified Architects**

247

Limit - \$5 million or below

66

**Limit - Between \$5 million
and \$25 million**

92

Limit - Unlimited

89

Diversity Programs

- Bonding and Working Capital
- Contractor Development
- One-stop Form Filing
- Small Business Carve-outs
- Workforce Monitoring Program

Bonding and Working Capital Assistance Program

Assists Small Business Enterprises (SBE's) in obtaining bonding or increase their bonding capacity to participate in SCC contracts

- **80 contractors enrolled to date**
 - 31 minority owned, 18 women owned, 29 small businesses
- **Confirmed bonding to 16 contractors to date (\$15.8 M)**

Contact: Surety Bond Associates Ellen Neylan 215.763.5815

Contractor Development Program

Statewide Contractor Development Program utilizes business development consultants to provide hands on assistance to help SBE's upgrade business management practices:

- Regional Alliance for Small Contractors (Northern Region)
- Greater Newark Business Development Consortium (Essex Region)
- Qualified Women in Construction (Eastern and Southern Region)
- Construction Project Management Services (Western Region)
- Visionary Business Solutions (Hudson Region)

Small Business Carve-Out Program:

Under this program, portions of individual projects are carved out (set-aside) to be bid exclusively by SBE's

**120 CONTRACTS
VALUED AT
\$241 MILLION IN FY 2004**

Milestones

Milestones

SCC Completes Health & Safety Repairs Throughout the State ***Impacts \$660 million for 344 Schools With No Delayed Openings***



December 2003



Milestones - SCC Opens New Schools Throughout NJ

Early Childhood Center

Gloucester City

May 2004



Milestones...

Groundbreakings for Central H.S. and Science Park H.S.

Newark

Spring 2004

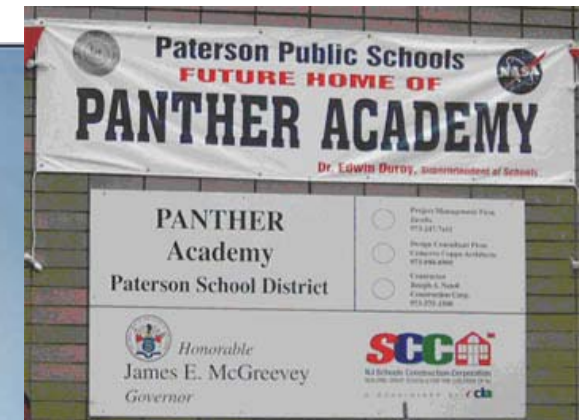


Milestones...

Paterson's P.A.N.T.H.E.R. Academy

Planetarium Dome for *New Aerospace Studies High School*

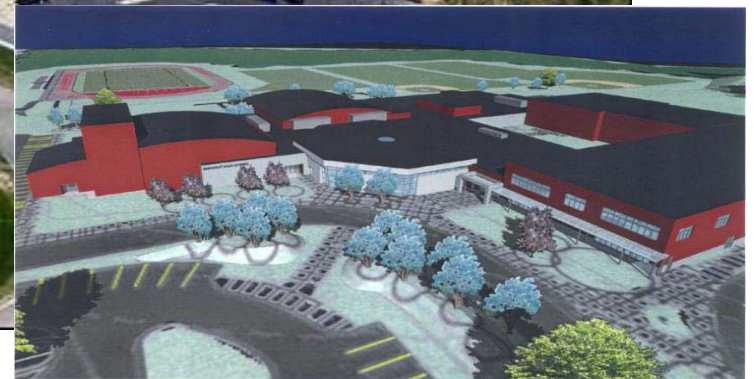
September 2004



Milestones - SCC Opens New Schools Throughout NJ

Barnegat High School

September 2004



Milestones - SCC Opens New Schools Throughout NJ

Middle School West New York September 2004



Milestones - SCC Opens New Schools Throughout NJ

Main Street K-8 School

Orange

September 2004



IN STREET SCHOOL
W JERSEY

YEZZI
ARCHI



Milestones - SCC Opens New Schools Throughout NJ

Union City Middle School

September 2004



Q&A

Part II

21st Century Schools

Policy Implementation-Building 21st Century Schools



- **Established & Implemented LEED Standards to Ensure Energy Efficiency and Healthy School Environments**
- **MOA with NJIT to Establish the High Performance Schools Initiative**
- **21st Century Schools Design Manual**

High Performance Schools

Schools must incorporate maximum operating efficiencies and new technologies to advance energy efficiency of schools and their operating systems.

Educational Facilities
Construction and Financing Act
Legislative Findings

“WHEREAS, it is in the best interests of the people of New Jersey that school facilities developed under the Act shall be modern facilities of the 21st century, combining all of these features: the best possible learning environment, the most energy-efficient design, the most environmentally sustainable systems, and the highest community relevance....”

Governor James E. McGreevey
New Jersey Executive Order #24

Leadership in Energy & Environmental Design **LEED**

Sustainable Sites

Water Efficiency

Energy & Atmosphere

Materials & Resources

Environmental Quality

NJIT School of Architecture High Performance Schools Information Center

- **Objective, research-based technical information**
- **Documentation of best practices**
- **Guidelines for high performance school design and construction**
- **Resources and training**

High Performance Schools

Key Characteristics

- Healthy and Productive:**

Enables students and teachers to achieve maximum potential by providing healthy, safe, and comfortable environments.

- Cost Effective:**

Provides facilities that save money over time by being efficient to build, maintain and operate.

- Educationally Effective:**

Provides a superior teaching and learning environment that accommodates present and future needs.

- Sustainable:**

Minimizes environmental impacts and maximizes the use of non-polluting, renewable resources.

- Community Centered:**

Creates schools that are integral parts of their communities.

Key Characteristics and Design Criteria

- **Healthy and Productive**
 - Acoustic comfort
 - Natural daylight
 - Superior indoor air quality
 - Safe and secure
 - Thermal and visual comfort
- **Cost Effective**
 - Commissioning
 - Energy analysis tools
 - Life-cycle cost approach
- **Educationally Effective**
 - Accessible and inclusive
 - Accommodates the learning needs of students both present and future
 - Flexible/adaptable
 - Integral part of the curriculum.
- **Sustainable**
 - Energy efficient building shell
 - Environmentally preferable materials and products
 - Environmentally responsive site planning
 - Meets LEED Requirements
 - High performance electric lighting
 - High performance HVAC
- **Community Centered**
 - Catalyst for economic development
 - Community involvement in development
 - Community use

21st Century Schools Design Manual

- Performance-based and flexible
- Focused on Performance Standards and Goals
 - How a Project Team is using the Design Criteria to achieve the Key Characteristics of a high performance school.
 - Design Performance Standards
- Deliverables
 - Required deliverables at key project review phases
 - Project Report Question/prompt-driven by PMF
 - Organized to address each individual Design Criteria
 - LEED Checklist
- Goals
 - Help Project Teams achieve high performance goals
 - Help NJSCC review Project Team progress in meeting goals and in overall performance evaluation

Program Phase



- | | | |
|--------------------------|------------|---|
| PG | 4.0 | Daylighting |
| <input type="checkbox"/> | 4.1 | Has daylighting been established as a specific design goal for the school and, in particular, for the classrooms? |
| <input type="checkbox"/> | 4.2 | How will siting and site elements influence the building's access to sunlight? |
| <input type="checkbox"/> | 4.3 | Can the site accommodate one-story construction to allow skylights or roof monitors in the classrooms? |
| <input type="checkbox"/> | 4.4 | Does the site allow the building to be oriented on an east-west axis to optimize southern exposure? |
| PG | 5.0 | Indoor Air Quality |
| <input type="checkbox"/> | 5.1 | Has superior indoor air quality been established as a design goal for the project? |
| <input type="checkbox"/> | 5.2 | Is the site near any sources of outdoor pollution? |
| <input type="checkbox"/> | 5.3 | How have the design consultants met the provisions of the ASHRAE 62.1 -2001 standard? |
| PG | 6.0 | Safe and Secure Environment |
| <input type="checkbox"/> | 6.1 | Has security been established as a design goal for the project? |

PROGRAM
REPORT GUIDE

PG

SD

DD

Schematic Design Phase



SD 4.0 Daylighting

- ☐ 4.1 What basic strategies are being considered for bringing daylight into the school, particularly the classrooms?
- ☐ 4.2 What strategies are being considered to control unwanted heat gain and glare?
- ☐ 4.3 What tools are being used to analyze the impact of any daylighting strategies on the electric lighting system and on visual comfort and energy use?
- ☐ 4.4 What are the preliminary results of these analyses?
- ☐ 4.5 How has the design consultant incorporated both daylighting and views to benefit as many users as possible and how have the anticipated performance been verified and coordinated with the MEP systems?

SD 5.0 Indoor Air Quality

- ☐ 5.1 Will the HVAC system being considered provide adequate ventilation, especially to the classrooms?
- ☐ 5.2 Does the basic layout of the school keep operable windows and air intake vents away from sources of exhaust?

SCHEMATIC
REPORT GUIDE

PG

SD

DD

Q&A